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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,825	01/16/2002	Jon P. Duvick	35718/242052(5718-158)	5366

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PIONEER HI-BRED INTERNATIONAL INC.
7100 N.W. 62ND AVENUE
P.O. BOX 1000
JOHNSTON, IA 50131

EXAMINER

IBRAHIM, MEDINA AHMED

ART UNIT PAPER NUMBER

1638

DATE MAILED: 03/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,825

Applicant(s)

DUVICK ET AL.

Examiner

Medina A Ibrahim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claim 1, drawn to isolated polypeptides having specified sequences, classified in class 530, subclass 372, for example.
- II. Claims 2-5, drawn to isolated nucleotide sequences having specified sequences, an expression vector and a host cell transformed with said nucleotide sequences, classified in class 435, subclass 69.1, for example.
- III. Claims 6- 31, drawn to a method for enhancing the defense response of a transgenic plant, plant cells and plants, classified in class 800, subclass 279, for example.
- IV. Claims 32-38, drawn to a method for enhancing stalk strength of a transgenic plant, classified in class 800, subclass 290, for example.
- V. Claim 39, drawn to a method for preventing oxidative damage of a transgenic plant, classified in class 800, subclass 278, for example.
- VI. Claims 40-41, drawn to a method for breeding pathogen resistance into a plant, classified in class 800, subclass 260, for example
- VII. Claims 42-43, drawn to a method for detecting expression of a nucleic acid in a plant, classified in class 435, subclass 6, for example.

For each of the inventions I-VII above, restriction to one of the following is also required under 35 USC 121. Therefore, election is required of one of inventions I-II and one of inventions (A)-(S).

- (A). SEQ ID NO: 1 or a nucleotide sequence encoding SEQ ID NO: 2
- (B). SEQ ID NO: 3 or a nucleotide sequence encoding SEQ ID NO: 4
- (C). SEQ ID NO: 5 or a nucleotide sequence encoding SEQ ID NO: 6
- (D). SEQ ID NO: 7 or a nucleotide sequence encoding SEQ ID NO: 8
- (E). SEQ ID NO: 9 or a nucleotide sequence encoding SEQ ID NO: 10
- (F). SEQ ID NO: 11 or a nucleotide sequence encoding SEQ ID NO: 12
- (G). SEQ ID NO: 13 or a nucleotide sequence encoding SEQ ID NO: 14
- (H). SEQ ID NO: 15
- (I). SEQ ID NO: 16 or a nucleotide sequence encoding SEQ ID NO: 17
- (J). SEQ ID NO: 18 or a nucleotide sequence encoding SEQ ID NO: 19
- (K). SEQ ID NO: 20 or a nucleotide sequence encoding SEQ ID NO: 21
- (L). SEQ ID NO: 22 or a nucleotide sequence encoding SEQ ID NO: 23
- (M). SEQ ID NO: 24 or a nucleotide sequence encoding SEQ ID NO: 25
- (N). SEQ ID NO: 26 or a nucleotide sequence encoding SEQ ID NO: 27
- (O). SEQ ID NO: 28 or a nucleotide sequence encoding SEQ ID NO: 29
- (P). SEQ ID NO: 30 or a nucleotide sequence encoding SEQ ID NO: 31
- (Q). SEQ ID NO: 32 or a nucleotide sequence encoding SEQ ID NO: 33
- (R). SEQ ID NO: 34 or a nucleotide sequence encoding SEQ ID NO: 35
- (S). SEQ ID NO: 36 or a nucleotide sequence encoding SEQ ID NO: 37

The inventions are distinct, each from the other because of the following reasons:

Inventions (A)-(S) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of

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operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions comprise structurally different polypeptides or structurally different polynucleotides. Also, different sequences have different effects. In addition, since each polynucleotide/polypeptide is disclosed in specific SEQ ID NO: the structural difference between the polynucleotides/polypeptides has not been shown to be obvious.

The inventions I-VII are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to divergent molecules having different functions and effects.

Inventions II and III-V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the isolated nucleotide sequence of Group II can be used in a materially different process than that of enhancing disease resistance, preventing oxidative stress, or enhancing stalk strength of a plant of Groups III-V, respectively, such as in hybridization assays.

Inventions III, IV, and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation because they use different starting material such as regulatory elements, and different end products because the resultant plants have different phenotypes, i.e, enhanced disease resistance, enhanced stalk strength, and resistance against oxidative damage.

The invention of Group VI is patentably distinct from each of the other group because it requires breeding of nontransgenic plants which is not required by any of the other groups.

The invention of Group VII is patentably distinct from each of the other group because it requires detection of nucleic acids that is not required by any of the other groups.

Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classifications, and the literature search required for one group is not required for another, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

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or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Papers related to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1638, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmission 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Medina A. Ibrahim whose telephone number is (703) 306-5822. The Examiner can normally be reached Monday-Thursday from 8:30AM to 5:30PM and every other Friday 9:00AM to 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

2/21/03

Mai



AMY J. NELSON, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600